



Structures uploaded into STN REGISTRY

Uploading L1.str



```

chain nodes :
1  2  3  4  5  6  7 13 14
ring nodes :
8  9 10
chain bonds :
1-2 1-14 2-3 2-6 3-4 4-5 4-7 5-13 8-9 8-10
exact/norm bonds :
1-2 1-14 2-3 2-6 3-4 4-5 4-7 5-13 8-9 8-10

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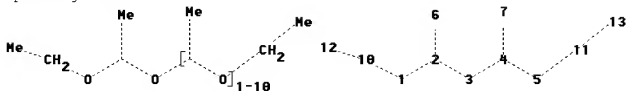
G1:Cb,Ak,H, [\*1]

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Match level :
1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 8:Atom 9:Atom
10:Atom
13:CLASS 14:CLASS

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Uploading L5.str



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chain nodes :
1  2  3  4  5  6  7 10 11 12 13
chain bonds :
1-2 1-10 2-3 2-6 3-4 4-5 4-7 5-11 10-12 11-13
exact/norm bonds :

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10/534,435

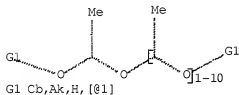
1-2 1-10 2-3 2-6 3-4 4-5 4-7 5-11 10-12 11-13

Match level :

1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 10:CLASS 11:CLASS  
12:CLASS 13:CLASS

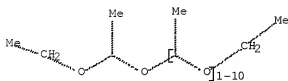
Structure search history

=> d stat query L8  
 L1 STR



Structure attributes must be viewed using STN Express query preparation.

L3 73 SEA FILE=REGISTRY SSS FUL L1  
 L5 STR



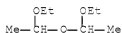
Structure attributes must be viewed using STN Express query preparation.

L7 5 SEA FILE=REGISTRY SUB=L3 SSS FUL L5  
 L8 9 SEA FILE=HCAPLUS ABB=ON PLU=ON L7

Structure search results

=&gt; d L8 1-9 ibib ed abs hitstr

L8 ANSWER 1 OF 9 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2008:144515 HCAPLUS Full-text  
 DOCUMENT NUMBER: 149:127071  
 TITLE: 1-ethoxy-1-(1-ethoxy-ethoxy)-ethane: a new  
 acetaldehyde precursor  
 AUTHOR(S): Gassenmeier, Klaus; Daniher, Andrew; Furrer, Stefan  
 CORPORATE SOURCE: Givaudan Schweiz AG, Dubendorf, 8600, Switz.  
 SOURCE: Developments in Food Science (2006), 43(Flavour  
 Science), 305-308  
 CODEN: DFSCDX; ISSN: 0167-4501  
 PUBLISHER: Elsevier B.V.  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 ED Entered STN: 05 Feb 2008  
 AB In a natural acetaldehyde rich fraction of orange oil 1-ethoxy-1-(1-ethoxy-  
 ethoxy)-ethane was identified. To the best of our knowledge this is the first  
 identification of 1-ethoxy-1-(1-ethoxy-ethoxy)-ethane in a natural product.  
 The release of acetaldehyde from 1-ethoxy-1-(1-ethoxy-ethoxy)-ethane at  
 various pH values was measured and compared to acetaldehyde release from  
 acetaldehyde di-Et acetal and aldexam.  
 IT 80243-06-7  
 RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
 (1-ethoxy-1-(1-ethoxy-ethoxy)-ethane as new acetaldehyde precursor for  
 food flavor)  
 RN 80243-06-7 HCAPLUS  
 CN Ethane, 1,1'-oxybis[1-ethoxy- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 2 OF 9 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2004:467837 HCAPLUS Full-text  
 DOCUMENT NUMBER: 141:38359  
 TITLE: Preparation of acetaldehyde-precursor flavor and  
 fragrance compounds  
 INVENTOR(S): Gassenmeier, Klaus; Nelissen, Jean Paul; Daniher,  
 Andrew; Furrer, Stefan Michael  
 PATENT ASSIGNEE(S): Givaudan S. A., Switz.  
 SOURCE: PCT Int. Appl., 17 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 2004048305 A1 20040610 WO 2003-CH784 20031126  
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW  
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG  
AU 2003281889 A1 20040618 AU 2003-281889 20031126  
US 20060034992 A1 20060216 US 2005-534435 20050510  
PRIORITY APPLN. INFO.: GB 2002-27681 A 20021127  
WO 2003-CH784 W 20031126

OTHER SOURCE(S): MARPAT 141:38359

ED Entered STN: 10 Jun 2004

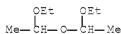
AB Acetaldehyde precursors, useful in flavors and fragrances, especially in consumable products, have the formula  $\text{RIOCH}(\text{CH}_3)\text{O}[\text{CH}(\text{CH}_3)\text{O}]_n\text{R}_2$  [R1, R2 = Et, (un)branched cyclic alkyl, aryl, alc., or sugar residue; n = 1-10; with the proviso that when R1 = R2 = Et then n = 1-4] are prepared. Thus, HCl gas was bubbled into acetaldehyde to give a dichlorodiethyl intermediate, which was reacted with an ethanolic sodium ethoxide solution to give 1-ethoxy-1-(1-ethoxyethoxy)ethane, which was used to produce an orange flavor which had a flash point of 48°.

IT 80243-06-7P

RL: FFD (Food or feed use); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of acetaldehyde-precursor flavor and fragrance compds.)

RN 80243-06-7 HCAPLUS

CN Ethane, 1,1'-oxybis[1-ethoxy- (9CI) (CA INDEX NAME)]

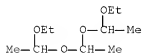


IT 644994-64-9P 701921-69-9P 701921-70-2P

RL: FFD (Food or feed use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of acetaldehyde-precursor flavor and fragrance compds.)

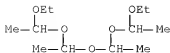
RN 644994-64-9 HCAPLUS

CN 3,5,7,9-Tetraoxaundecane, 4,6,8-trimethyl- (CA INDEX NAME)



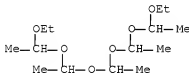
RN 701921-69-9 HCAPLUS

CN 3,5,7,9,11-Pentaoxaundecane, 4,6,8,10-tetramethyl- (CA INDEX NAME)



RN 701921-70-2 HCAPLUS

CN 3,5,7,9,11,13-Hexaoxapentadecane, 4,6,8,10,12-pentamethyl- (CA INDEX NAME)



REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 3 OF 9 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1982:121906 HCAPLUS [Full-text](#)

DOCUMENT NUMBER: 96:121906

ORIGINAL REFERENCE NO.: 96:20001a,20004a

TITLE: Hydrolysis of aldal acetals

AUTHOR(S): Oon, Su Min; Kubler, Donald G.

CORPORATE SOURCE: Furman Univ., Greenville, SC, 29613, USA

SOURCE: Journal of Organic Chemistry (1982), 47(7), 1166-71

CODEN: JOCEAH; ISSN: 0022-3263

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 12 May 1984

AB Eleven aldal acetals were prepared and the kinetics of their hydrolysis in H<sub>2</sub>O and in H<sub>2</sub>O-MeCN were studied as model systems for the hydrolysis of sucrose. (EtOCH<sub>2</sub>Et)<sub>2</sub>O (I) hydrolyzes in H<sub>2</sub>O without hemiacetal buildup. The reaction is not subject to general acid catalysis and the value of  $k_{D3+O}/k_{H3+O} = 2.44$ , both results being characteristic of an A1 mechanism. The energy of activation for the hydrolysis of I is 84.98 kJ mol<sup>-1</sup> in H<sub>2</sub>O and shows no temperature dependency at 15-35°. The structural effects for the hydrolysis of aldal acetals parallel those for acetal hydrolysis.

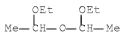
IT 80243-06-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

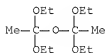
(preparation and hydrolysis of, kinetics of)

RN 80243-06-7 HCAPLUS

CN Ethane, 1,1'-oxybis[1-ethoxy- (9CI) (CA INDEX NAME)]



L8 ANSWER 4 OF 9 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1962:52787 HCAPLUS Full-text  
 DOCUMENT NUMBER: 56:52787  
 ORIGINAL REFERENCE NO.: 56:9930g-i,9931a-b  
 TITLE: Alkyl peroxides. XXVII. Perortho acids. III. Peroxides  
 from ketene acetals  
 AUTHOR(S): Schmitz, Ernst; Rieche, Alfred; Beyer, Elfriede  
 CORPORATE SOURCE: German Acad. Sci., Berlin-Adlershof  
 SOURCE: Chemische Berichte (1961), 94, 2921-6  
 CODEN: CHBEAM; ISSN: 0009-2940  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Unavailable  
 ED Entered STN: 22 Apr 2001  
 AB cf. CA 56, 46051. Ketene acetals with H2O2 yield the corresponding ortho  
 esters of diacyl peroxides and with alkyl hydroperoxides the perortho esters.  
 Ketene ethylene acetal (I) (5.7 g.) in 10 cc. dry Et2O treated with stirring  
 and cooling with 5 cc. 5M H2O2 in Et2O, refrigerated overnight, diluted with  
 Et2O, washed with cold dilute NaOH, dried, and evaporated gave 1.8 g.  
 crystalline bis-(2-methyl-1,3-dioxolan-2-yl) peroxide, m. 66-70°. CH2:C(OEt)2  
 (II) (1.4 g.) gave similarly 1.2 g. [MeC(OEt)2O]2, m. -7 to -6°. II (1.16 g.)  
 and 2.76 g. Ph3COOH in Et2O mixed at 0°, refrigerated overnight, and  
 evaporated, and the residue triturated with petr. ether and seeded gave 0.3 g.  
 Ph3COH; the filtrate evaporated and cooled to -78° yielded 2.7 g.  
 MeC(OEt)2OOCPh3, m. 49-51° (petr. ether). Isochromanyl hydroperoxide (1.66  
 g.) and 1.16 g. II in 5 cc. each, mixed, kept at 0° overnight, and evaporated,  
 and the residue dissolved in petr. ether and worked up gave 2.1 g. crystalline  
 di-Et OO-isochromanyl perorthoacetate, m. 49° (petr. ether). II (2.3 g.) and  
 1.8 g. Me3COOH in Et2O mixed with cooling and kept 12 hrs. at 0° gave 2.0 g.  
 MeC(OEt)2OOCMe3, b4 47°, n20D 1.406. I and Ph3COOH gave similarly 54%  
 ethylene OO-trityl perorthoacetate, m. 139-40° (Et2O); and I and Me3COOH  
 yielded 24% ethylene OO-tert-butyl perorthoacetate, b12 68-9°, n20D 1.4206.  
 PhCH:C(OEt)2 (1.9 g.) and 2.76 g. Ph3COOH in Et2O mixed, kept 4 hrs. at 0°,  
 and evaporated, and the residue digested with petr. ether gave 0.15 g. Ph3COH  
 and 1.9 g. PhC(OEt)2OOCPh3, m. 72-3° (petr. ether). NCCH:C(OMe)2 (1.1 g.) in  
 10 cc. dry Et2O treated with 1.6 g. Tetralin hydroperoxide and then with a few  
 drops concentrated HCl, kept 2 hrs. at 0°, and worked up gave 1.0 g. di-Me OO-  
 tetralyl perorthocynoacetate, m. 87° (Et2O).  
 IT 856318-77-9P, Orthoacetic acid, diethyl ester, anhydride with  
 MeC(OEt)2-(O2H)  
 RL: PREP (Preparation)  
 (preparation of)  
 RN 856318-77-9 HCAPLUS  
 CN Orthoacetic acid, diethyl ester, anhydride with MeC(OEt)2-(O2H) (7CI) (CA  
 INDEX NAME)

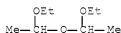


L8 ANSWER 5 OF 9 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1953:15922 HCAPLUS  
 DOCUMENT NUMBER: 47:15922  
 ORIGINAL REFERENCE NO.: 47:2766i,2767a-b

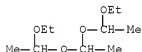


TITLE: Sulfur-containing reaction products from formaldehyde and hydrogen sulfide  
 INVENTOR(S): von Zeppelin, Helmut  
 PATENT ASSIGNEE(S): Zeppelin-Chemie Konstanz  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Unavailable  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	DE 820000		19511108	DE	
ED	Entered STN: 22 Apr 2001				
AB	Causing CH <sub>2</sub> O to react with H <sub>2</sub> S in the presence of water and alkali-metal hydrosulfides or substances yielding them (such as alkalies or alkali-metal sulfides on reaction with H <sub>2</sub> S), at pH 7.3-11, preferably 8.8-10.4, gives thioformaldehyde (I), useful as pigment or intermediate. The reaction is formulated as: CH <sub>2</sub> O + H <sub>2</sub> S → CH <sub>2</sub> S + H <sub>2</sub> O. The mol. ratio should be less than 0.3 mol. alkali-metal hydrosulfide/mol. CH <sub>2</sub> O. H <sub>2</sub> S introduced into an aqueous CH <sub>2</sub> O solution 1037 (CH <sub>2</sub> O content 33 parts by weight) at 90-5° does not react; adding a 9% NaSH solution 20 cc. pts. white I: introducing further amts. of H <sub>2</sub> S and NaSH solution 5 cc., filtering when the CH <sub>2</sub> O odor has disappeared, and washing and drying the precipitate gives I 46.5 parts (92%).				
IT	80243-06-7F, Ether, bis(1-ethoxyethyl) 644994-64-9F, Acetaldehyde, bis(1-ethoxyethyl) acetal RL: PREP (Preparation) (preparation of)				
RN	80243-06-7 HCAPLUS				
CN	Ethane, 1,1'-oxybis[1-ethoxy- (9CI) (CA INDEX NAME)				



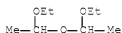
RN 644994-64-9 HCAPLUS  
 CN 3,5,7,9-Tetraoxaundecane, 4,6,8-trimethyl- (CA INDEX NAME)



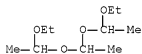
L8 ANSWER 6 OF 9 HCAPLUS COPYRIGHT 2008 ACS ON STN  
 ACCESSION NUMBER: 1953:15921 HCAPLUS  
 DOCUMENT NUMBER: 47:15921  
 ORIGINAL REFERENCE NO.: 47:2766i  
 TITLE: Polyacetals  
 INVENTOR(S): Fenne, Derrick J.; Mugdan, Martin; Mugdan, Magdalena S.  
 PATENT ASSIGNEE(S): Distillers Co. Ltd.  
 DOCUMENT TYPE: Patent

LANGUAGE: Unavailable  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	US 2607804		19520819	US	
ED	Entered STN: 22 Apr 2001				
AB	See Brit. 661, 184 (C.A. 47, 600i).				
IT	80243-06-7P, Ether, bis(1-ethoxyethyl) 644994-64-9P, Acetaldehyde, bis(1-ethoxyethyl) acetal RL: PREP (Preparation) (preparation of)				
RN	80243-06-7 HCAPLUS				
CN	Ethane, 1,1'-oxybis[1-ethoxy- (9CI) (CA INDEX NAME)]				

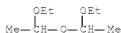


RN 644994-64-9 HCAPLUS  
 CN 3,5,7,9-Tetraoxaundecane, 4,6,8-trimethyl- (CA INDEX NAME)

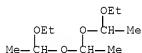


L8 ANSWER 7 OF 9 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1953:15920 HCAPLUS  
 DOCUMENT NUMBER: 47:15920  
 ORIGINAL REFERENCE NO.: 47:2766h-i  
 TITLE: Carboxyalkylmercapto-stilbonic acids  
 INVENTOR(S): Steiger, Norbert; Keller, Oscar  
 PATENT ASSIGNEE(S): F. Hoffmann-La Roche & Co. A.-G.  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Unavailable  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	GB 659250		19511017	GB 1949-17826	19490706
ED	Entered STN: 22 Apr 2001				
AB	See U.S. 2,584,639 (C.A. 46, 11238f).				
IT	80243-06-7P, Ether, bis(1-ethoxyethyl) 644994-64-9P, Acetaldehyde, bis(1-ethoxyethyl) acetal RL: PREP (Preparation) (preparation of)				
RN	80243-06-7 HCAPLUS				
CN	Ethane, 1,1'-oxybis[1-ethoxy- (9CI) (CA INDEX NAME)]				

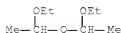


RN 644994-64-9 HCAPLUS  
 CN 3,5,7,9-Tetraoxaundecane, 4,6,8-trimethyl- (CA INDEX NAME)



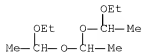
L8 ANSWER 8 OF 9 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1953:3382 HCAPLUS  
 DOCUMENT NUMBER: 47:3382  
 ORIGINAL REFERENCE NO.: 47:601a-c  
 TITLE: Crotonaldehyde  
 PATENT ASSIGNEE(S): Badische Anilin- & Soda-Fabrik (I. G. Farbenindustrie Akt.-Ges. "In Auflösung")  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Unavailable  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
	GB 660972		19511114	GB 1949-26942	19491020
ED	Entered STN: 22 Apr 2001				
AB	A continuous process for the production of MeCH:CHCHO (I) is described. AcH (II) treated (280 kg./hr.) with 10% aqueous NaOH solution at 20° to 50% aldolization is passed directly into a vessel containing 30% aqueous NaH <sub>2</sub> PO <sub>4</sub> at 90°, 32% aqueous H <sub>3</sub> PO <sub>4</sub> added continuously at a rate sufficient to maintain a pH of 2-7 in the reaction vessel, and liquid I removed at the bottom of the vessel and, together with vapors of I and II removed at the top, purified by distillation; the yield of I is 100 kg./hr.				
IT	80243-06-7P, Ether, bis(1-ethoxyethyl) 644994-64-9P, 3,5,7,9-Tetraoxaundecane, 4,6,8-trimethyl- RL: PREP (Preparation) (preparation of)				
RN	80243-06-7 HCAPLUS				
CN	Ethane, 1,1'-oxybis[1-ethoxy- (9CI) (CA INDEX NAME)				



RN 644994-64-9 HCAPLUS

CN 3,5,7,9-Tetraoxaundecane, 4,6,8-trimethyl- (CA INDEX NAME)



L8 ANSWER 9 OF 9 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1953:3381 HCAPLUS

DOCUMENT NUMBER: 47:3381

ORIGINAL REFERENCE NO.: 47:6001,601a

TITLE: Polyacetals

INVENTOR(S): Fenne, Derrick J.; Mugdan, Martin I.; Mugdan, Magdalena S.

PATENT ASSIGNEE(S): Distillers Co. Ltd.

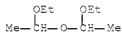
DOCUMENT TYPE: Patent

LANGUAGE: Unavailable

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

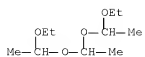
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
	GB 661184		19511121	GB	
ED	Entered STN: 22 Apr 2001				
AB	Polyacetals (I) are prepared from acetal (II) and AcH (III) at 20° to -50° by addition of an acid catalyst. To equimolar quantities of freshly distilled II, b. 103-4°, and III at -45°, 0.01 mol-% H <sub>2</sub> SO <sub>4</sub> (based on III) is added to yield 28% diacetal and triacetal. A molar ratio of II:III of 2:1, a temperature of -20°, and 0.1 mol-% MeHSO <sub>4</sub> as catalyst raises the yield to 40%. Other acids which can be used are HCl and HBr. The higher reaction temps. require less catalyst. A larger excess of III yields higher polymeric 1. The I are useful as froth flotation agents and as intermediates.				
IT	80243-06-7P, Ether, bis(1-ethoxyethyl) 644994-64-9P, Acetaldehyde, bis(1-ethoxyethyl) acetal				
	RL: PREP (Preparation)				
	(preparation of)				
RN	80243-06-7 HCAPLUS				
CN	Ethane, 1,1'-oxybis[1-ethoxy- (9CI) (CA INDEX NAME)				



RN 644994-64-9 HCAPLUS

CN 3,5,7,9-Tetraoxaundecane, 4,6,8-trimethyl- (CA INDEX NAME)

10/534,435



Inventor search history

=&gt; d his L20

(FILE 'HCAPLUS' ENTERED AT 12:02:00 ON 07 NOV 2008)

L20 33 S L13 OR L16-L19

=&gt; d que L20

L9 25 SEA FILE=HCAPLUS ABB=ON PLU=ON NELISSEN J?/AU  
 L10 19 SEA FILE=HCAPLUS ABB=ON PLU=ON GASSENMEIER K?/AU  
 L11 33 SEA FILE=HCAPLUS ABB=ON PLU=ON FURRER S?/AU  
 L12 26 SEA FILE=HCAPLUS ABB=ON PLU=ON DANIHER A?/AU  
 L13 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L9 AND L10 AND L11 AND L12  
 L14 94 SEA FILE=HCAPLUS ABB=ON PLU=ON (L9 OR L10 OR L11 OR L12)  
 L15 42 SEA FILE=HCAPLUS ABB=ON PLU=ON L14 AND GIVAUD?/CO,CS,PA,SO  
 L16 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L9 AND (L10 OR L11 OR L12)  
 L17 2 SEA FILE=HCAPLUS ABB=ON PLU=ON L10 AND (L11 OR L12)  
 L18 6 SEA FILE=HCAPLUS ABB=ON PLU=ON L11 AND L12  
 L19 33 SEA FILE=HCAPLUS ABB=ON PLU=ON L15 AND (FLAVO? OR FRAGR? OR  
 GUSTAT? OR SCENT? OR AROMA? OR TAST?)  
 L20 33 SEA FILE=HCAPLUS ABB=ON PLU=ON L13 OR (L16 OR L17 OR L18 OR  
 L19)

=&gt; d his L26

(FILE 'MEDLINE, BIOSIS, EMBASE, DRUGU, KOSMET' ENTERED AT 12:08:09 ON 07 NOV 2008)

L26 11 S L24 OR L25  
 SAVE TEMP L26 DEE435MLIN/A

FILE 'HCAPLUS' ENTERED AT 12:11:41 ON 07 NOV 2008

FILE 'MEDLINE, BIOSIS, EMBASE, DRUGU, KOSMET' ENTERED AT 12:11:43 ON 07 NOV 2008

=&gt; d que L26

L9 25 SEA FILE=HCAPLUS ABB=ON PLU=ON NELISSEN J?/AU  
 L10 19 SEA FILE=HCAPLUS ABB=ON PLU=ON GASSENMEIER K?/AU  
 L11 33 SEA FILE=HCAPLUS ABB=ON PLU=ON FURRER S?/AU  
 L12 26 SEA FILE=HCAPLUS ABB=ON PLU=ON DANIHER A?/AU  
 L14 94 SEA FILE=HCAPLUS ABB=ON PLU=ON (L9 OR L10 OR L11 OR L12)  
 L15 42 SEA FILE=HCAPLUS ABB=ON PLU=ON L14 AND GIVAUD?/CO,CS,PA,SO  
 L16 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L9 AND (L10 OR L11 OR L12)  
 L17 2 SEA FILE=HCAPLUS ABB=ON PLU=ON L10 AND (L11 OR L12)  
 L18 6 SEA FILE=HCAPLUS ABB=ON PLU=ON L11 AND L12  
 L19 33 SEA FILE=HCAPLUS ABB=ON PLU=ON L15 AND (FLAVO? OR FRAGR? OR  
 GUSTAT? OR SCENT? OR AROMA? OR TAST?)  
 L22 5 SEA L19  
 L23 2 SEA (L16 OR L17 OR L18)  
 L24 5 SEA L22 OR L23  
 L25 11 SEA L14 AND (FLAVO? OR FRAGR? OR GUSTAT? OR SCENT? OR AROMA?  
 OR TAST?)  
 L26 11 SEA L24 OR L25

=&gt; dup rem L20 L26

DUPLICATE IS NOT AVAILABLE IN 'KOSMET'.  
 ANSWERS FROM THESE FILES WILL BE CONSIDERED UNIQUE

10/534,435

FILE 'HCAPLUS' ENTERED AT 12:12:14 ON 07 NOV 2008  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
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FILE 'BIOSIS' ENTERED AT 12:12:14 ON 07 NOV 2008  
Copyright (c) 2008 The Thomson Corporation  
PROCESSING COMPLETED FOR L20  
PROCESSING COMPLETED FOR L26  
L27           42 DUP REM L20 L26 (2 DUPLICATES REMOVED)  
              ANSWERS '1-33' FROM FILE HCAPLUS  
              ANSWERS '34-42' FROM FILE BIOSIS

Inventor search results

=&gt; d L27 1-42 ibib ab

L27 ANSWER 1 OF 42 HCAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 1  
 ACCESSION NUMBER: 2003:283357 HCAPLUS Full-text  
 DOCUMENT NUMBER: 138:400716  
 TITLE: Vanillin and xanthine oxidase-key factors for the generation of a cardboard off-note in vanilla ice cream  
 AUTHOR(S): G ssermeier, Klaus  
 CORPORATE SOURCE: Givaudan Flavours Ltd., D sbendorf, CH-8600, Switz.  
 SOURCE: Lebensmittel-Wissenschaft und -Technologie (2003), 36(1), 99-103  
 CODEN: LBWTAP; ISSN: 0023-6438  
 PUBLISHER: Elsevier Science Ltd.  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB The interactions of vanillin with proteins, oxygen and enzymes are investigated in the context of "cardboard" and "oxidised" off-notes in ice-cream. A pathway for the generation of "cardboard" off notes in ice-cream is proposed. Model expts. proved the rapid generation of a cardboard off-note and conclusions are drawn, how such a reaction can be avoided.  
 REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 2 OF 42 HCAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 2  
 ACCESSION NUMBER: 2002:6332 HCAPLUS Full-text  
 DOCUMENT NUMBER: 136:69088  
 TITLE: Epoxydecalen isomers  
 INVENTOR(S): Daniher, Andrew; Furrer, Stefan;  
 Goeke, Andreas  
 PATENT ASSIGNEE(S): Givaudan S. A., Switz.  
 SOURCE: U.S., 8 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6335047	B1	20020101	US 2000-706993	20001106
US 20020081370	A1	20020627	US 2001-962406	20010925
US 6451366	B2	20020917		

PRIORITY APPLN. INFO.: US 2000-706993 A2 20001106

AB A method of producing a more intense flavorant. Trans-4,5-epoxy-(E)-2-decalen is enriched to contain at least 90% of the (-)-isomer and is added to a product in an amount sufficient to flavor the product. The product may be a food or beverage. Addition of the substantially pure (-)-isomeric form of trans-4,5-epoxy-(E)-2-decalen achieves enhanced product taste and/or aroma, and provides increased economy and efficiency in its production  
 REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 3 OF 42 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2008:770084 HCAPLUS Full-text  
 DOCUMENT NUMBER: 149:78231



TITLE: N-substituted-p-menthane-3-carboxamide and uses thereof  
 INVENTOR(S): Furrer, Steffan; Tondeur, Sander; Winkel, Chris; Renes, Harry  
 PATENT ASSIGNEE(S): Quest International Services B. V., Neth.; Givaudan S. A.  
 SOURCE: PCT Int. Appl., 24pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2008075942	A1	20080626	WO 2007-NL50609	20071130
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
PRIORITY APPLN. INFO.:			EP 2006-126622 US 2007-982464P	A 20061220 P 20071025

OTHER SOURCE(S): CASREACT 149:78231; MARPAT 149:78231

AB Substances and compns. having a physiol. cooling effect on the skin and the mucosa of the body, especially of the oral cavity, throat and nose are provided. More in particular, the present invention relates to N-substituted-p-menthane-3-carboxamides and esters thereof. These substances are capable of imparting and/or enhancing a physiol. cooling effect in a product in which they are incorporated, much more effectively than the heretofore known N-substituted-p-menthane-3-carboxamides. Thus, a hard boiled sweets formulation comprises 220g of sugar, 75g of water, 100g of glucose syrup 35DE, and 5 ppm of 2-isopropyl-5-methyl-cyclohexanecarboxylic acid(2-hydroxy-2-phenylethyl)-amide.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 4 OF 42 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2008:389886 HCAPLUS Full-text

TITLE: Crystalline packing: A crucial aspect for developing new cooling agents

AUTHOR(S): Furrer, Stefan M.

CORPORATE SOURCE: Ingredient Systems, Givaudan Flavors R&D, Cincinnati, OH, 45216, USA

SOURCE: Abstracts of Papers, 235th ACS National Meeting, New Orleans, LA, United States, April 6-10, 2008 (2008), MEDI-333. American Chemical Society: Washington, D. C.  
 CODEN: 69KNN3

DOCUMENT TYPE: Conference; Meeting Abstract; (computer optical disk)  
 LANGUAGE: English

AB Until recently the flavor industry dealt mostly with volatile compds. and crystalline compds. were more an exception than a rule. More recently,

efforts towards the discovery of new taste modulators, fueled by ground breaking discoveries in receptor technol. and taste physiolog., led us to focus on nonvolatile chems. The water solubility as well as solubility in various oils was soon recognized to be a decisive factor for the development of active compds. In this presentation we will discuss the role played by crystalline packing and water solubility during the development of our newest generation of cooling chems. X-ray crystallog. gave us essential clues on factors that stabilize or disrupt lattices and was further used for designing of new cooling compds. The role of physicochem. structural properties governing aqueous and mint oil solubility and their application in the development of a new generation of cooling agents will be discussed as well.

L27 ANSWER 5 OF 42 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2008:787202 HCAPLUS Full-text

DOCUMENT NUMBER: 149:377227

TITLE: Commercial quality and analytical parameters of cured vanilla beans (*Vanilla planifolia*) from different origins from the 2006-2007

AUTHOR(S): Gassenmeier, K.; Riesen, B.; Magyar, B.

CORPORATE SOURCE: Givaudan Schweiz AG, Dübendorf, CH-8600, Switz.

SOURCE: Flavour and Fragrance Journal (2008), 23(3), 194-201

CODEN: FFJOED; ISSN: 0882-5734

PUBLISHER: John Wiley & Sons Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB An overview on the vanilla bean production and com. grades from the major vanilla producing areas is given. More than 90 samples of cured vanilla beans from the 2006-2007 crop were obtained and the samples were classified into com. grades. The concentration of vanillin, vanillic acid, p-hydroxybenzaldehyde and p-hydroxybenzoic acid was determined and related to shape, length and color of the beans. Huge differences in anal. parameters between origins and from batch to batch were found. From Madagascar beans only 50% meet all values of the so-called "ratios". Many samples contained less vanillin than required by some authorities. The average vanillin content of all Madagascar samples was 1.76 g/100 g. Sensory evaluation of exts. showed no clear relationship between vanillin content and sensory profile of the vanilla exts.

REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 6 OF 42 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:1090812 HCAPLUS Full-text

DOCUMENT NUMBER: 147:412745

TITLE: Flavorant and fragrance furanone compounds

INVENTOR(S): Furrer, Stefan Michael; Schieberle, Peter; Burdack-Freitag, Andrea

PATENT ASSIGNEE(S): Givaudan SA, Switz.

SOURCE: PCT Int. Appl., 19pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007107023	A1	20070927	WO 2007-CH142	20070315

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.: US 2006-784813P P 20060322

OTHER SOURCE(S): MARPAT 147:412745

AB A method of providing a flavor or a fragrance to a composition includes adding furanone I (R1, R3 = independently, H, C1-10 straight chain alkyl or branched chain alkyl; R2, R4 = independently, C1-10 straight chain alkyl or branched chain alkyl) to the composition Flavored and fragranced products including I are also provided. 5-Ethyl-4,5-dimethyl-3-propylfuran-2(5H)-one, prepared from 3-hydroxy-3-methyl-2-pentanone and di-Et propylmalonate, had a slightly minty, green, fruity, buttery odor.

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 7 OF 42 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:883729 HCAPLUS Full-text

TITLE: The impact of physicochemical properties on sensorial dynamic: The cooling sensation

AUTHOR(S): Furrer, Stefan M.

CORPORATE SOURCE: Ingredient Systems, Givaudan Flavors R&D, Cincinnati, OH, 45216, USA

SOURCE: Abstracts of Papers, 234th ACS National Meeting, Boston, MA, United States, August 19-23, 2007 (2007), MEDI-374. American Chemical Society: Washington, D. C.

CODEN: 69JNR2

DOCUMENT TYPE: Conference; Meeting Abstract; (computer optical disk)

LANGUAGE: English

AB Physicochem. properties represent a major factor in the design of new active ingredients. Although physicochem. properties (such as logP) are well studied in the flavor industry for volatile compds., their impact on taste sensations is less known. Using cooling compds. as a case study, the impact of such properties on taste sensations and flavor applications was investigated.

L27 ANSWER 8 OF 42 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:539662 HCAPLUS Full-text

TITLE: New Developments in the Chemistry of Cooling Compounds

AUTHOR(S): Furrer, Stefan

CORPORATE SOURCE: Ingredient Systems, Chemistry Section, Givaudan Flavors Corp., Cincinnati, OH, 45216, USA

SOURCE: Abstracts, 39th Central Regional Meeting of the American Chemical Society, Covington, KY, United States, May 20-23 (2007), CRM-168. American Chemical Society: Washington, D. C.

CODEN: 69JFCV

DOCUMENT TYPE: Conference; Meeting Abstract

LANGUAGE: English

AB The research on cooling chems. spans over more than thirty years. Initially, the target was the discovery of new odorless and tasteless cooling agents more potent than menthol. Pioneered by Wilkinson Sword and later picked up by the flavor and fragrance industry, the development is leading towards more potent and longer lasting cooling agents. The discovery in the area of cooling research was greatly accelerated by recent advances in receptor technol., computational chemical and physiol. principles underlining the cooling perception. The pharmaceutical industry became interested in this type of compds. as potentially therapeutic agents after TRPM8 receptors were discovered in different tissues and organs. Examples from Givaudan research and from published literature will be presented.

L27 ANSWER 9 OF 42 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:877901 HCAPLUS Full-text  
 TITLE: New developments in the chemistry of cooling compounds  
 AUTHOR(S): Furrer, Stefan M.; Slack, Jay P.; McCluskey, Scott; Baniher, Andrew T.; Bell, Karen; Krawec, Pablo; Cole, Lucienne; Gray, Kim  
 CORPORATE SOURCE: Ingredient Systems, Givaudan Flavors R&D, Cincinnati, OH, 45216, USA  
 SOURCE: Abstracts of Papers, 234th ACS National Meeting, Boston, MA, United States, August 19-23, 2007 (2007), AGFD-064. American Chemical Society: Washington, D. C.  
 CODEN: 69JNR2  
 DOCUMENT TYPE: Conference; Meeting Abstract; (computer optical disk)  
 LANGUAGE: English

AB Cooling chems., particularly menthol, have long played a central role in the flavor and fragrance industry. They are largely used in mint flavors and in oral care products and each particular area of usage requires finely tuned properties (potency, solubility, volatility, organoleptic profile). Over 30 years ago, Wilkinson Sword discovered new odorless and tasteless cooling agents with a potency comparable to menthol, a breakthrough that allowed exploring novel applications with unique results. Recent advances in receptor technol., computational chemical and better understanding of physiol. principles underlining the cooling perception brought a new dimension to the development of novel cooling chems. In this presentation, we will discuss recent discoveries in cooling research, including novel cooling chems. and their effectiveness in various applications.

L27 ANSWER 10 OF 42 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:510443 HCAPLUS Full-text  
 DOCUMENT NUMBER: 145:27733  
 TITLE: Preparation of carboxamides having a cooling taste and sensation and formulations containing them  
 INVENTOR(S): Galopin, Christophe; Furrer, Stefan Michael; Slack, Jay Patrick; Krawec, Pablo Victor; Cole, Lucienne  
 PATENT ASSIGNEE(S): Givaudan S. A., Swiss  
 SOURCE: PCT Int. Appl., 18 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.

KIND DATE

APPLICATION NO.

DATE

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WO 2006056087      A1      20060601      WO 2005-CH687      20051121
W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
    CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
    GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR,
    KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX,
    MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE,
    SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC,
    VN, YU, ZA, ZM, ZW
RW:  AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
    IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
    CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
    GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
    KG, KZ, MD, RU, TJ, TM
EP 1814845      A1      20070808      EP 2005-803136      20051121
R:  AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
    IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR
CN 101065351      A      20071031      CN 2005-80040183      20051121
JP 2008520594      T      20080619      JP 2007-541629      20051121
MX 200705406      A      20070516      MX 2007-5406      20070504
IN 2007DN03446      A      20070831      IN 2007-DN3446      20070509
US 20080112899      A1      20080515      US 2007-666625      20070525
PRIORITY APPLN. INFO.:      GB 2004-25661      A      20041123
                               WO 2005-CH687      W      20051121

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OTHER SOURCE(S): CASREACT 145:27733; MARPAT 145:27733

AB The title carboxamides [I; X = (CH<sub>2</sub>)<sub>m</sub>R; R = group comprising at least one free electron pair; m = 0-1; Y, Z = H, OH, C1-4 alkyl, alkoxy; XY = OCH<sub>2</sub>O, N:CHO, N:CHNH, N:CHS which forms together with the carbon atoms to which they are attached a 5-membered ring; n = 0-1; R1 = H, C1-4 alkyl; R2, R3 = C1-4 alkyl; where the sum of carbon atoms of R1-R3 is ≥6; e.g., N-(4-cyanophenyl)-2-isopropylisovaleramide], which have a cooling taste and sensation on mucous membranes, are prepared and I-containing formulations (e.g., mouthwash) are presented.

REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 11 OF 42 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2008:144515 HCAPLUS Full-text

DOCUMENT NUMBER: 149:127071

TITLE: 1-ethoxy-1-(1-ethoxy-ethoxy)-ethane: a new acetaldehyde precursor

AUTHOR(S): Gassenmeier, Klaus; Daniher, Andrew  
; Furrer, Stefan

CORPORATE SOURCE: Givaudan Schweiz AG, Dubendorf, 8600, Switz.

SOURCE: Developments in Food Science (2006), 43(Flavour Science), 305-308

CODEN: DFSCDX; ISSN: 0167-4501

PUBLISHER: Elsevier B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB In a natural acetaldehyde rich fraction of orange oil 1-ethoxy-1-(1-ethoxy-ethoxy)-ethane was identified. To the best of our knowledge this is the first identification of 1-ethoxy-1-(1-ethoxy-ethoxy)-ethane in a natural product. The release of acetaldehyde from 1-ethoxy-1-(1-ethoxy-ethoxy)-ethane at various pH values was measured and compared to acetaldehyde release from acetaldehyde di-Et acetal and aldmax.

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 12 OF 42 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:1074178 HCAPLUS Full-text  
 DOCUMENT NUMBER: 142:37920  
 TITLE: Preparation of alkyl-2-enoic acid esters useful as fragrances or flavorants  
 INVENTOR(S): Furrer, Stefan Michael; Galopin, Christophe; Sperry, Justin; Yang, Xiaogen; Bratton, David Patrick  
 PATENT ASSIGNEE(S): Givaudan S. A., Switz.  
 SOURCE: PCT Int. Appl., 11 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004108653	A1	20041216	WO 2004-CH331	20040602
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1633693	A1	20060315	EP 2004-735715	20040602
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK				
CN 1802342	A	20060712	CN 2004-80015876	20040602
BR 2004011087	A	20060725	BR 2004-11087	20040602
JP 2006527285	T	20061130	JP 2006-515618	20040602
US 20060142177	A1	20060629	US 2005-559194	20051202
IN 2005CN03303	A	20070720	IN 2005-CN3303	20051207
PRIORITY APPLN. INFO.:			GB 2003-13173	A 20030607
			WO 2004-CH331	W 20040602

OTHER SOURCE(S): MARPAT 142:37920  
 AB Alkyl-2-enoic acid esters R3(R2)C:CHCO2R1 [R1 = C4-6 (un)branched alkyl; R2, R3 = H, Me, Et; where only one of R2 or R3 is H; e.g., 2-methylbutyl 3-methyl-2-butenate prepared by the esterification of racemic 2-methyl-1-butanol with 3,3-dimethylacrylic acid] are prepared and used in flavor and fragrance compns. for foods, cosmetics, pharmaceuticals, etc.

REFERENCE COUNT: 6  
 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 13 OF 42 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2004:467837 HCAPLUS Full-text  
 DOCUMENT NUMBER: 141:38359  
 TITLE: Preparation of acetaldehyde-precursor flavor and fragrance compounds  
 INVENTOR(S): Gassenmeier, Klaus; Nelissen, Jean Paul; Daniher, Andrew; Furrer, Stefan Michael  
 PATENT ASSIGNEE(S): Givaudan S. A., Switz.  
 SOURCE: PCT Int. Appl., 17 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004048305	A1	20040610	WO 2003-CH784	20031126
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
AU 2003281889	A1	20040618	AU 2003-281889	20031126
US 20060034992	A1	20060216	US 2005-534435	20050510
PRIORITY APPLN. INFO.:			GB 2002-27681	A 20021127
			WO 2003-CH784	W 20031126

OTHER SOURCE(S): MARPAT 141:38359

AB Acetaldehyde precursors, useful in flavors and fragrances, especially in consumable products, have the formula  $\text{R1OCH(CH3)O[CH(CH3)O]}_n\text{R2}$  [R1, R2 = Et, (un)branched cyclic alkyl, aryl, alc., or sugar residue; n = 1-10; with the proviso that when R1 = R2 = Et then n = 1-4] are prepared. Thus, HCl gas was bubbled into acetaldehyde to give a dichlorodiethyl intermediate, which was reacted with an ethanolic sodium ethoxide solution to give 1-ethoxy-1-(1-ethoxyethoxy)ethane, which was used to produce an orange flavor which had a flash point of 48°.

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 14 OF 42 HCAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 2004:162550 HCAPLUS Full-text  
DOCUMENT NUMBER: 140:216518  
TITLE: Improvements in or related to organic compounds  
INVENTOR(S): Daniher, Andrew  
PATENT ASSIGNEE(S): Givaudan S. A., Switz.  
SOURCE: PCT Int. Appl., 10 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004016105	A1	20040226	WO 2003-CH554	20030815
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
AU 2003250713	A1	20040303	AU 2003-250713	20030815
PRIORITY APPLN. INFO.:			GB 2002-19212	A 20020819

OTHER SOURCE(S): MARPAT 140:216518

AB A flavor or fragrance composition comprises a compound of formula (I) (R2C(R3)C(F)(CH2)2C(R1)(CH)2O); R1, R2, and R3 = H, Me or ethyl). Methods of flavoring or of adding fragrance to food, beverage or consumer product or household product using these compds are presented.

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 15 OF 42 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:101119 HCAPLUS Full-text

DOCUMENT NUMBER: 140:145102

TITLE: Flavorant aliphatic or aromatic

unsatd. amide compounds for food use

INVENTOR(S): Galopin, Christophe; Goeke, Andreas; Furrer, Stefan

PATENT ASSIGNEE(S): Givaudan SA, Switz.

SOURCE: PCT Int. Appl., 15 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004011415	A1	20040205	WO 2003-CH500	20030723
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
AU 2003245800	A1	20040216	AU 2003-245800	20030723
EP 1525184	A1	20050427	EP 2003-737827	20030723
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK			
JP 2005533897	T	20051110	JP 2004-523719	20030723
IN 2004CN03060	A	20060217	IN 2004-CH3060	20041231
US 20050233042	A1	20051020	US 2005-522113	20050125
PRIORITY APPLN. INFO.:			US 2002-398449P	P 20020725
			WO 2003-CH500	W 20030723

OTHER SOURCE(S): MARPAT 140:145102

AB Use as a flavor ingredient of an aliphatic or aromatic unsatd. amide of formula (I, R' (CH)nCONHCH2C(R') (R'') (R''')), where R' is H or OH, n is 1 or 2; R'' is RvCHCH(CH2)m when n is 2, m being 1, 2 or 3; R''' and R'''' are H, Cl-C4 alkyl, benzyl or form a 5- or 6-membered carbocyclic ring with the carbon to which they are attached; and Rv is alkyl or alkenyl is described. When n is 1, R'' may also be a Ph group.

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 16 OF 42 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:649927 HCAPLUS Full-text

DOCUMENT NUMBER: 144:127868

TITLE: Comparison of the key odorants in fresh and cooked



Lentils (*L. culinaris* M.)  
 AUTHOR(S): Lubian, E.; Riesen, B.; Gassenmeier, K.  
 CORPORATE SOURCE: Flavor Science, Givaudan Schweiz AG,  
 Duebendorf, CH-8600, Switz.  
 SOURCE: State-of-the-Art in Flavour Chemistry and Biology,  
 Proceedings of the Wartburg Symposium on Flavour  
 Chemistry and Biology, 7th, Eisenach, Germany, Apr.  
 21-23, 2004 (2004), 491-494. Editor(s): Hofmann,  
 Thomas; Rothe, Manfred; Schieberle, Peter. Deutsche  
 Forschungsanstalt fuer Lebensmittelchemie: Garching,  
 Germany.  
 CODEN: 69HCQQ; ISBN: 3-00-015809-X  
 DOCUMENT TYPE: Conference  
 LANGUAGE: English  
 AB Lentils (*Lens culinaris* M.) are legumes primarily used in human foods.  
 Although there is a large amount of literature dealing with composition and  
 nutritional properties, almost nothing is known about their volatile  
 constituents. The key odorants of raw and cooked lentils were analyzed by Gas  
 Chromatog.-Mass Spectrometry and by aroma extract dilution techniques.  
 Results showed that, among others 2-ethylpyrazine, 2-acetyl-5-methylpyrazine,  
 2-acetyl-3,5-dimethylpyrazine, 2-acetyl-5-methylthiazole with roasty odor,  
 maltol, 4-vinylguaicol and methional were present as potent odorants in the  
 cooked lentils. The major odorants evaluated by aroma extract dilution anal.  
 and their concns. were compared before and after cooking.  
 REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 17 OF 42 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2004:435402 HCAPLUS [Full-text](#)  
 TITLE: Structure Property Relationship of Chemosensates  
 AUTHOR(S): Galopin, Christophe; Tigani, Lori; Fuxer,  
 Stefan  
 CORPORATE SOURCE: Ingredient Systems, Chemistry Section,  
 Givaudan Flavors Corp., Cincinnati, OH, 45216,  
 USA  
 SOURCE: Abstracts, 36th Central Regional Meeting of the  
 American Chemical Society, Indianapolis, IN, United  
 States, June 2-4 (2004), INV-330. American Chemical  
 Society: Washington, D. C.  
 CODEN: 69FMAU  
 DOCUMENT TYPE: Conference; Meeting Abstract  
 AB With the advances in understanding the mechanism of taste transduction and  
 perception, it is now possible to elaborate Structure Property Relationships  
 (SPRs) for sensate compds. such as those responsible for heat and cooling  
 sensations. We will discuss the elements necessary to the establishment of a  
 coherent SPR as well as the tools and methods used to establish and  
 extrapolate SPRs. Examples from Givaudan research and from published  
 literature will be presented.

L27 ANSWER 18 OF 42 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2005:649895 HCAPLUS [Full-text](#)  
 DOCUMENT NUMBER: 144:231923  
 TITLE: Aromas of fruits collected in the rainforest  
 of the Masoala Peninsula, Madagascar: *Mimusops*  
*perrieri* Capuron ex Aubrev., *Tinopsis antongiliensis*  
*Capuron*, *Potameia thouarsiana* (Baill.) Capuron and  
*Xylopia buxifolia* Baill  
 AUTHOR(S): Gassenmeier, K.; Yang, X.; Grab, W.  
 CORPORATE SOURCE: Givaudan Schweiz AG, Duebendorf, CH-8600,

Switz.  
 SOURCE: State-of-the-Art in Flavour Chemistry and Biology, Proceedings of the Wartburg Symposium on Flavour Chemistry and Biology, 7th, Eisenach, Germany, Apr. 21-23, 2004 (2004), 300-307. Editor(s): Hofmann, Thomas; Rothe, Manfred; Schieberle, Peter. Deutsche Forschungsanstalt fuer Lebensmittelchemie: Garching, Germany.  
 CODEN: 69HCQQ; ISBN: 3-00-015809-X

DOCUMENT TYPE: Conference  
 LANGUAGE: English

AB During a scientific mission to the Rainforest of the Masoala Peninsula, Madagascar, samples of *Mimusops perrieri* Capuron ex Aubrev., *Tinopsis antongiliensis* Capuron, *Potameia thouarsiana* (Baill.) Capuron and *Xylopia buxifolia* Baill. have been collected. The aroma profiles of the fruits are reported. The compds. present in the headspace of the fruits were trapped on Porapak Q and analyzed by gas chromatog. mass spectrometry. The contribution of individual compds. to the flavor profile is discussed, based on the results of the instrumental anal. and gas chromatog. olfactometry.

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 19 OF 42 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2003:878116 HCAPLUS [Full-text](#)  
 DOCUMENT NUMBER: 141:5899  
 TITLE: Interactions of selected flavor compounds with selected dairy products  
 Gassenmeier, Klaus  
 AUTHOR(S): Givaudan Schweiz AG, Duebendorf, Switz.  
 CORPORATE SOURCE: Food Science and Technology (New York, NY, United States) (2004), 131(Handbook of Flavor Characterization), 259-266  
 SOURCE: CODEN: FSTEEM; ISSN: 0891-8961  
 PUBLISHER: Marcel Dekker, Inc.  
 DOCUMENT TYPE: Journal; General Review  
 LANGUAGE: English

AB A review on the interaction of flavor compds. with dairy products, particularly the interaction of aroma compds. with fermented and non-fermented dairy products. In dairy products with living microorganisms aldehydes can be degraded partially or completely during fermentation and/or storage. The major degradation mechanism is the reduction to the corresponding alcs., which might be the cause of a loss of aroma impact, change in aroma profile, and/or formation of unwanted notes. In non-fermented dairy products specific interactions of aroma compds. were also found. One reaction is the oxidation of vanillin into vanillic acid, which is catalyzed by xanthine oxidase (XO). XO can release reactive oxygen species during oxidation, which may generate ~~aroma~~-active compds. and trigger autoxidn.

REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 20 OF 42 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2003:944238 HCAPLUS [Full-text](#)  
 DOCUMENT NUMBER: 140:180285  
 TITLE: Pungent and tingling compounds in Asian cuisine  
 Galopin, Christophe C.; Ferrer, Stefan M.;  
 AUTHOR(S): Goeke, Andreas  
 CORPORATE SOURCE: Givaudan Flavors R&D, Ingredient Systems, Cincinnati, OH, 45069, USA  
 SOURCE: ACS Symposium Series (2004), 867(Challenges in Taste Chemistry and Biology), 139-152

CODEN: ACSMC8; ISSN: 0097-6156

PUBLISHER: American Chemical Society  
DOCUMENT TYPE: Journal; General Review  
LANGUAGE: English

AB A review. Southern Asian cuisine is well known for its use of flavorful and pungent spices. The sanshool chems., such as  $\alpha$ -hydroxy-sanshool from the Japanese Sanchoo pepper and other Asian peppers, are particularly interesting because they not only give a hot sensation in the mouth cavity but also a tingling effect on the tongue. In order to understand the effect of the sanshool chems. the authors have synthesized a variety of derivs. Tasting of those derivs. provided information about Structure Activity Relationship (SAR) for the tingling effect exhibited by these chems. Based on this study the authors are able to propose a minimal structure required for the tingling effect. We also used this SAR knowledge to design stable compds. with potential tingling effect.

REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 21 OF 42 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:649866 HCAPLUS Full-text

DOCUMENT NUMBER: 144:376012

TITLE: Structure property relationship of chemosensates

AUTHOR(S): Galopin, C.; Tigani, L.; Fuxer, S.

CORPORATE SOURCE: Givaudan Flavors Corp., Cincinnati, OH, 45216, USA

SOURCE: State-of-the-Art in Flavour Chemistry and Biology, Proceedings of the Wartburg Symposium on Flavour Chemistry and Biology, 7th, Eisenach, Germany, Apr. 21-23, 2004 (2004), 61-67. Editor(s): Hofmann, Thomas; Rothe, Manfred; Schieberle, Peter. Deutsche Forschungsanstalt fuer Lebensmittelchemie: Garching, Germany.

CODEN: 69HCQQ; ISBN: 3-00-015809-X

DOCUMENT TYPE: Conference; General Review

LANGUAGE: English

AB A review. With the advances in understanding the mechanism of taste transduction and perception, it is now possible to elaborate Structure Property Relationships (SPRs) for sensate compds. such as those responsible for heat and cooling sensations. Various elements are necessary for the establishment of a coherent SPR (Data selection, score function, data collection). It is also important to be aware of the tools and methods used to establish and extrapolate SPRs.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 22 OF 42 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:696644 HCAPLUS Full-text

DOCUMENT NUMBER: 139:213340

TITLE: Brassica seeds

INVENTOR(S): Binggeli, Eva; Gassenmeier, Klaus; Molnar, Jeff; Schieberle, Peter

PATENT ASSIGNEE(S): Givaudan SA, Switz.

SOURCE: PCT Int. Appl., 20 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.

KIND DATE

APPLICATION NO.

DATE

WO 2003071863 A2 20030904 WO 2003-CH142 20030226  
 WO 2003071863 A3 20040318  
 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,  
 CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,  
 GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,  
 LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,  
 PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA,  
 UG, US, UZ, VN, YU, ZA, ZM, ZW  
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,  
 KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,  
 FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF,  
 BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG  
 US 20030165587 A1 20030904 US 2002-84899 20020228  
 AU 2003248346 A1 20030909 AU 2003-248346 20030226  
 EP 1478225 A2 20041124 EP 2003-742904 20030226  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK  
 US 20050053714 A1 20050310 US 2004-505251 20041029  
 PRIORITY APPLN. INFO.: US 2002-84899 A 20020228  
 WO 2003-CH142 W 20030226  
 AB Treated Brassica seeds and their exts. for use as a flavor and/or a flavor  
 modifier in consumables are presented. Treatment includes heating, and  
 optionally grinding methods and/or recovery methods. Consumables include  
 foods, beverages, health-care products, oral hygiene and oral care products,  
 beauty-care products, and tobacco products. The extract contains elevated  
 amts. of flavor and flavor modifier. One flavor modifier of the extract may  
 be 2-furfurylthiol ('FFT'). A process for producing treated Brassica seeds  
 extract is presented.

L27 ANSWER 23 OF 42 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2003:855419 HCAPLUS Full-text  
 DOCUMENT NUMBER: 139:322664  
 TITLE: Inhibition of non-enzymatic browning in packaged foods  
 INVENTOR(S): Daniher, Andrew; Furrer, Stefan  
 PATENT ASSIGNEE(S): Givaudan SA, Switz.  
 SOURCE: U.S. Pat. Appl. Publ., 12 pp.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20030203082	A1	20031030	US 2002-134433	20020430
WO 2003093133	A1	20031113	WO 2003-CH279	20030430
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
AU 2003218860	A1	20031117	AU 2003-218860	20030430
EP 1499540	A1	20050126	EP 2003-714607	20030430

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK  
 PRIORITY APPLN. INFO.: US 2002-134433 A 20020430  
 WO 2003-CH279 W 20030430

AB A method and device to inhibit non-enzymic browning in susceptible foods, such as fruit products, is disclosed. An inhibitor of non-enzymic browning is placed within a container for the food to contact the food and hence reduce, retard, or prevent browning. The inhibitor may be integral to the container or added to the container. The inhibitor may be contained within or on a support structure that is integral with, or added to, a food-contacting internal surface of the container. The food thus contained will desirably have reduced off-color, off-notes, and/or off- tastes that may be imparted by compds. associated with non-enzymic browning.

L27 ANSWER 24 OF 42 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:313079 HCAPLUS Full-text  
 DOCUMENT NUMBER: 141:173224  
 TITLE: Formation of cardboard off-notes in vanilla ice-cream  
 AUTHOR(S): Gassenmeier, Klaus  
 CORPORATE SOURCE: Givaudan Flavours Ltd., Duebendorf, CH-8600, Switz.

SOURCE: Flavour Research at the Dawn of the Twenty-First Century, Proceedings of the Weurman Flavor Research Symposium, 10th, Beaune, France, June 25-28, 2002 (2003), Meeting Date 2002, 91-94. Editor(s): Le Quere, Jean-Luc; Etievant, Patrick X. Editions Tec & Doc: Paris, Fr.  
 CODEN: 69FGPR; ISBN: 2-7430-0639-0

DOCUMENT TYPE: Conference  
 LANGUAGE: English

AB The interactions of vanillin with proteins, oxygen and enzymes in the context of "cardboard" and "oxidized" off-notes in ice-cream are investigated. Model expts. using pasteurized cream and milk, and vanillin lead to a rapid generation of a cardboard off-note. It is proposed that during the oxidation of vanillin into vanillic acid reactive oxygen species are formed, which react with unsatd. fatty acids to yield hydroperoxides. These subsequently decompose into aroma active fat oxidation products.

REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 25 OF 42 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2002:488080 HCAPLUS Full-text  
 DOCUMENT NUMBER: 137:32528  
 TITLE: Epoxydecenal isomers enrichment as flavoring materials.  
 INVENTOR(S): Daniher, Andrew; Furrer, Stefan;  
 Goeke, Andreas  
 PATENT ASSIGNEE(S): Givaudan SA, Switz.

SOURCE: U.S. Pat. Appl. Publ., 9 pp., Cont.-in-part of U. S. Ser. No. 706,993.  
 CODEN: USXXCO

DOCUMENT TYPE: Patent  
 LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20020081370	A1	20020627	US 2001-962406	20010925

US 6451366 B2 20020917  
 US 6335047 B1 20020101 US 2000-706993 20001106  
 PRIORITY APPLN. INFO.: US 2000-706993 A2 20001106  
 AB A method of producing a potent epoxydecenal flavorant. Trans-4,5-epoxy-(E)-2-decenal(I) is enriched to contain at least 90% of the (-) isomer and is added to a product in an amount sufficient to flavor the product. The product may be a food or beverage. Addition of the substantially pure (-)-I achieves enhanced product taste and/or aroma, and provides increased economy and efficiency in its production

L27 ANSWER 26 OF 42 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2002:944458 HCAPLUS Full-text  
 DOCUMENT NUMBER: 138:13596  
 TITLE: Flavour and fragrance compositions for food and cosmetic use  
 INVENTOR(S): Grab, Willi; Ratcliff, Damian John; Furcer, Stefan  
 PATENT ASSIGNEE(S): Givaudan SA, Switz.  
 SOURCE: Eur. Pat. Appl., 11 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1264547	A1	20021211	EP 2001-113787	20010606
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
WO 2002098241	A1	20021212	WO 2002-CH288	20020603
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2002304945	A1	20021216	AU 2002-304945	20020603
EP 1392132	A1	20040303	EP 2002-732297	20020603
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
CN 1512844	A	20040714	CN 2002-811331	20020603
CN 1267018	C	20060802		
BR 2002010160	A	20040803	BR 2002-10160	20020603
JP 2004527639	T	20040909	JP 2003-501290	20020603
JP 4098232	B2	20080611		
IN 2003CN01903	A	20060106	IN 2003-CN1903	20030603
MX 2003PA11128	A	20040319	MX 2003-PA11128	20031203
US 20040253362	A1	20041216	US 2004-479453	20040729
PRIORITY APPLN. INFO.: EP 2001-113787 A 20010606				
WO 2002-CH288 W 20020603				

OTHER SOURCE(S): MARPAT 138:13596  
 AB Flavor and fragrance comps. comprise 1-mercapto-1-arylalkanes, especially 1-mercapto-1-phenylalkanes, or derivs. thereof.  
 REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 27 OF 42 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2002:613373 HCAPLUS Full-text

TITLE: Interactions of flavor compounds with dairy products

AUTHOR(S): Gessnermeier, Klaus

CORPORATE SOURCE: Flavour Science, Givaudan Flavours Ltd, CH-8600 Dubendorf, N/A, Switz.

SOURCE: Abstracts of Papers, 224th ACS National Meeting, Boston, MA, United States, August 18-22, 2002 (2002), AGFD-136. American Chemical Society: Washington, D. C.

CODEN: 69CZPZ

DOCUMENT TYPE: Conference; Meeting Abstract

LANGUAGE: English

AB The specific flavor of food is one of its most important properties. Customers build their preferences based on the aroma. All flavorings - natural, artificial or endogene - may undergo interactions, which are specific for dairy products. Interactions based on phys. absorption mechanism to milk proteins can lead to aroma changes and suppression. Very important are the interactions of aroma compds. with milk enzymes. It is shown how vanillin is degraded by xanthine oxidase into vanillic acid. Model expts. clearly indicate, that this can lead to a cardboard off-note in dairy products. The involved mechanism is discussed in detail. Furthermore the interaction of flavor compds. with fermented milk products is investigated. It was found that lactic acid bacteria selectively degrade aldehydes and in such a way change the aroma profile of e.g. yogurts. This reaction takes place not only during fermentation but also during storage.

L27 ANSWER 28 OF 42 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2002:613257 HCAPLUS Full-text

TITLE: Pungent and tingling compounds in Asian cuisine

AUTHOR(S): Galopin, Christophe C.; Furrer, Stefan M.; Goeke, Andreas

CORPORATE SOURCE: Ingredient Systems, Givaudan Flavors R&D, Cincinnati, OH, 45216, USA

SOURCE: Abstracts of Papers, 224th ACS National Meeting, Boston, MA, United States, August 18-22, 2002 (2002), AGFD-056. American Chemical Society: Washington, D. C.

CODEN: 69CZPZ

DOCUMENT TYPE: Conference; Meeting Abstract

LANGUAGE: English

AB Southern Asian cuisine is well known for its use of flavorful and pungent spices. The sanshool chems., such as alpha-hydroxy-sanshool from the Japanese Sancho pepper and other Asian peppers, are particularly interesting because they not only give a hot sensation in the mouth cavity but also a tingling effect on the tongue. In order to understand the effect of the sanshool chems. we have synthesized a variety of derivs. Tasting of those derivs. provided information about Structure Activity Relationship (SAR) for the tingling effect exhibited by these chems. Based on this study we are able to propose a minimal structure required for the tingling effect. We also used this SAR knowledge to design stable compds. with potential tingling effect.

L27 ANSWER 29 OF 42 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2001:432273 HCAPLUS Full-text

DOCUMENT NUMBER: 135:151956

TITLE: Flavor of aromatic fruits and

spices from the tropical rain forest. A field study  
 Gassenmeier, Klaus; Yang, Xiaogen; Grab,  
 Willi; Peppet, Jeff; Eilerman, Robert  
 Givaudan Flavours Ltd., Dübendorf, 8600,  
 Switz.

AUTHOR(S):

CORPORATE SOURCE:

SOURCE: Chimia (2001), 55(5), 435-440  
 CODEN: CHIMAD; ISSN: 0009-4293

PUBLISHER: Neue Schweizerische Chemische Gesellschaft

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Consumers demand new and improved flavor sensations, which cannot always be fulfilled by traditional flavors from known fruits. Inspiration for new developments in Flavors may be generated from plant material originating from the tropical rain forests. The tropics house 80 to 90% of all plant species and the aromatic aspects of most of these are entirely unknown. Field methods for the collection of samples, the isolation and conservation of the aroma compds. in very remote areas are presented. The overall flavor profile and the key aroma compds. of selected fruits and "garlic" barks collected from the Gabonese tropical rain forest "foret des Abeilles" are described.

REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 30 OF 42 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2001:912026 HCAPLUS [Full-text](#)

DOCUMENT NUMBER: 136:324259

TITLE: Headspace aroma of "wild onion" trees

AUTHOR(S): Yang, Xiaogen; Josephson, Dave; Peppet, Jeff;  
 Eilerman, Robert; Grab, Willi; Gassenmeier,  
 Klaus

CORPORATE SOURCE: Givaudan Flavors Corp., Cincinnati, OH, 45216,  
 USA

SOURCE: Special Publication - Royal Society of Chemistry  
 (2001), 274(Food Flavors and Chemistry), 266-273  
 CODEN: SROCDQ; ISSN: 0260-6291

PUBLISHER: Royal Society of Chemistry

DOCUMENT TYPE: Journal

LANGUAGE: English

AB In the Gabonese rain forest, there are at least 4 types of trees whose bark have strong garlic-like or onion-like odor. They are often called "wild onion trees". These trees were identified as *Afrostryx kamerunensis* Huac., *Scorodophloeus zenkere* Huac., *Hua gabonii* Huac., and *Afrostryx lepidophyllus* Huac. The bark of the trees are used for cooking. The leaves and seeds of *H. gabonii* and *A. lepidophyllus*, and the roots from young trees of *A. kamerunensis* are also used in flavoring sauces. In addition, the bark also are used for medicinal purposes. The volatile components of freshly cut bark of 3 species: *A. kamerunensis*, *S. zenkere*, *H. gabonii* were collected and analyzed. Many sulfur-containing compds. were present in the headspace. The character impact compds. were identified as di-Me disulfide, 2,3,5-trithiahexane, 2,4,6-trithiaheptane, and 2,4-dithiapentane by GC sniffing.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 31 OF 42 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2001:554410 HCAPLUS [Full-text](#)

DOCUMENT NUMBER: 136:84886

TITLE: The relationship between GC-olfactometric data and the perceived flavour during consumption

AUTHOR(S): De Roos, K. B.; Nelissen, J. F.

CORPORATE SOURCE: Givaudan Roure Flavors Ltd, Dübendorf, 8600,  
 Switz.



SOURCE: Frontiers of Flavour Science, [Proceedings of the Weurman Flavour Research Symposium], 9th, Freising, Germany, June 22-25, 1999 (2000), Meeting Date 1999, 248-252. Editor(s): Schieberle, Peter; Engel, Karl-Heinz. Deutsche Forschungsanstalt fuer Lebensmittelchemie: Garching, Germany.  
CODEN: 69BOX5

DOCUMENT TYPE: Conference  
LANGUAGE: English

AB Gas chromatog.-olfactometry (GCO) on exts. does not provide a useful estimate of the contribution of odor active compds. to the total flavor impact. Estns. of the contribution of volatiles to the static headspace smell can be wrong by a factor of more than 1,000,000. GCO on static headspace, or correction of FD factors of exts. for differences in the gas-liquid partition coeffs., provide an accurate estimate of the contribution of the flavor compds. to the static headspace smell. However, estimation of the contribution to the total flavor impact under dynamic conditions is less satisfactory. The errors made when predicting the contribution of the flavor components to flavor perception under dynamic conditions vary with the nature of the flavor chems. and the product.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 32 OF 42 HCAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 2001:554389 HCAPLUS Full-text  
DOCUMENT NUMBER: 136:84849  
TITLE: Thermodesorption in flavour analysis  
AUTHOR(S): Gassenmeier, K.  
CORPORATE SOURCE: Givaudan Roure Flavor Ltd., Duebendorf, 8600, Switz.

SOURCE: Frontiers of Flavour Science, [Proceedings of the Weurman Flavour Research Symposium], 9th, Freising, Germany, June 22-25, 1999 (2000), Meeting Date 1999, 135-139. Editor(s): Schieberle, Peter; Engel, Karl-Heinz. Deutsche Forschungsanstalt fuer Lebensmittelchemie: Garching, Germany.  
CODEN: 69BOX5

DOCUMENT TYPE: Conference  
LANGUAGE: English

AB Direct thermodesorption (TD) of food allows the identification of high boiling compds. with little sample preparation. A wide range of compds. can be identified by headspace thermodesorption, but a conclusion on the quant. composition of the sample is hardly possible. The use of appropriate stds. or stable isotope labeled stds. in combination with headspace TD enables rapid quantification of flavor compds. in complex matrixes.

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 33 OF 42 HCAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 1997:157388 HCAPLUS Full-text  
DOCUMENT NUMBER: 126:250282  
ORIGINAL REFERENCE NO.: 126:48399a,48402a  
TITLE: Unusual flavor instability in functional drinks  
AUTHOR(S): Grab, Willi; Gassenmeier, Klaus; Schenk, Hanspeter  
CORPORATE SOURCE: Givaudan-Roure, Duebendorf, CH8600, Switz.  
SOURCE: Special Publication - Royal Society of Chemistry (1996), 197(Flavour Science), 430-432  
CODEN: SROCDQ; ISSN: 0260-6291

PUBLISHER: Royal Society of Chemistry  
 DOCUMENT TYPE: Journal; General Review  
 LANGUAGE: English  
 AB A discussion with 8 refs. on trying to identify the real reason for the unusual reduction process as to flavor instability in functional drinks.

L27 ANSWER 34 OF 42 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on STN

ACCESSION NUMBER: 2007:22632 BIOSIS Full-text  
 DOCUMENT NUMBER: PREV20070003281  
 TITLE: Organoleptic compositions: use of 3-mercapto alkanolic acid esters as flavor ingredients.  
 AUTHOR(S): Anonymous; Gassenmeier, Klaus [Inventor]; Grab, Willi [Inventor]; Galopin, Christophe [Inventor]; Bigler, Beatrice [Inventor]  
 CORPORATE SOURCE: Dubendorf, Switzerland  
 ASSIGNEE: Givaudan SA  
 PATENT INFORMATION: US 07105194 20060912  
 SOURCE: Official Gazette of the United States Patent and Trademark Office Patents, (SEP 12 2006)  
 CODEN: OGUPE7. ISSN: 0098-1133.  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 ENTRY DATE: Entered STN: 27 Dec 2006  
 Last Updated on STN: 27 Dec 2006

AB The present invention relates to flavor or fragrance composition comprising at least one compound of the formula 1 or a precursor thereof, wherein R1 represents a branched or unbranched alkyl, alkenyl or alkadienyl group containing 1 to 8 carbon atoms and R2 represents a methyl or an ethyl group and to a method of flavoring a food, a beverage or a consumer healthcare or household product using at least one of these compounds.

L27 ANSWER 35 OF 42 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on STN

ACCESSION NUMBER: 2006:256563 BIOSIS Full-text  
 DOCUMENT NUMBER: PREV200600257008  
 TITLE: Statement on the identification in nature of flavouring substances, made by the Working Group on Methods of Analysis of the International Organization of the Flavour Industry (IOFI).  
 AUTHOR(S): Brevard, H.; Cachet, T.; Chaintreau, A.; Demyttenaere, J.; Dijkhuizen, A.; Gassenmeier, K.; Joulain, D.; Koenig, T.; Leijts, H.; Liddle, P.; Loesing, G.; Marin, C.; Scotti, A.; Sherlock, A.; Tateba, H.; IOFI [Reprint Author]  
 SOURCE: Flavour and Fragrance Journal, (JAN-FEB 2006) Vol. 21, No. 1, pp. 185.  
 CODEN: FFJOED. ISSN: 0882-5734.  
 DOCUMENT TYPE: Article  
 LANGUAGE: English  
 ENTRY DATE: Entered STN: 3 May 2006  
 Last Updated on STN: 3 May 2006

L27 ANSWER 36 OF 42 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on STN

ACCESSION NUMBER: 2006:94540 BIOSIS Full-text  
 DOCUMENT NUMBER: PREV200600094976  
 TITLE: Statement on the identification in nature of flavouring substances, made by the Working Group on

Methods of Analysis of the International Organization of the Flavour Industry (IOFI).

AUTHOR(S): Brevard, H.; Cachet, T.; Chaintreau, A.; Demyttenaere, J.; Dijkhuizen, A.; Gassenmeier, K.; Joulain, D.; Koenig, T.; Leijls, H.; Liddle, P.; Loesing, G.; Marin, C.; Scotti, A.; Sherlock, A.; Tateba, H.

SOURCE: Flavour and Fragrance Journal, (NOV-DEC 2005) Vol. 20, No. 6.

CODEN: FFJOED. ISSN: 0882-5734.

DOCUMENT TYPE: Article  
Editorial

LANGUAGE: English

ENTRY DATE: Entered STN: 1 Feb 2006  
Last Updated on STN: 1 Feb 2006

L27 ANSWER 37 OF 42 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on STN

ACCESSION NUMBER: 2002:582939 BIOSIS Full-text

DOCUMENT NUMBER: PREV200200582939

TITLE: Epoxydecal isomers.

AUTHOR(S): Denihar, Andrew [Inventor]; Furrer, Stefan [Inventor]; Goeke, Andreas [Inventor, Reprint author]

CORPORATE SOURCE: Dubendorf, Switzerland  
ASSIGNEE: Givaudan SA, Switzerland

PATENT INFORMATION: US 6451366 20020917

SOURCE: Official Gazette of the United States Patent and Trademark Office Patents, (Sep. 17, 2002) Vol. 1262, No. 3.  
<http://www.uspto.gov/web/menu/patdata.html>. e-file.  
CODEN: OGPUET. ISSN: 0098-1133.

DOCUMENT TYPE: Patent

LANGUAGE: English

ENTRY DATE: Entered STN: 13 Nov 2002  
Last Updated on STN: 13 Nov 2002

AB A method of producing a potent epoxydecal flavorant. Trans-4,5-epoxy-(E)-2-decal is enriched to contain at least 90% of the (-) isomer and is added to a product in an amount sufficient to flavor the product. The product may be a foodstuff, such as a food or beverage. Addition of the substantially pure (-)-trans-4,5-epoxy-(E)-2-decal isomeric form achieves enhanced product taste and/or aroma, and provides increased economy and efficiency in its production.

L27 ANSWER 38 OF 42 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on STN

ACCESSION NUMBER: 2002:521273 BIOSIS Full-text

DOCUMENT NUMBER: PREV200200521273

TITLE: Interactions of flavor compounds with dairy products.

AUTHOR(S): Gassenmeier, Klaus [Reprint author]

CORPORATE SOURCE: Flavour Science, Givaudan Flavours Ltd, Ueberlandstr. 138, CH-8600, Dubendorf, Switzerland  
[klaus.gassenmeier@givaudan.com](mailto:klaus.gassenmeier@givaudan.com)

SOURCE: Abstracts of Papers American Chemical Society, (2002) Vol. 224, No. 1-2, pp. AGFD 136. print.  
Meeting Info.: 224th National Meeting of the American Chemical Society. Boston, MA, USA. August 18-22, 2002.  
CODEN: ACSRAL. ISSN: 0065-7727.

DOCUMENT TYPE: Conference; (Meeting)  
Conference; Abstract; (Meeting Abstract)

LANGUAGE: English

ENTRY DATE: Entered STN: 9 Oct 2002  
Last Updated on STN: 9 Oct 2002

L27 ANSWER 39 OF 42 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on STN

ACCESSION NUMBER: 1995:509739 BIOSIS Full-text  
DOCUMENT NUMBER: PREV199598514789  
TITLE: Potent aromatic compounds in the crumb of wheat bread (French-type): Influence of pre-ferments and studies on the formation of key odorants during dough processing.  
AUTHOR(S): Gassenmeier, Klaus; Schieberle, Peter [Reprint author]  
CORPORATE SOURCE: Deutsche Forschungsanstalt fuer Lebensmittelchemie, Lichtenbergstrasse 4, D-85748 Garching, Germany  
SOURCE: Zeitschrift fuer Lebensmittel-Untersuchung und -Forschung, (1995) Vol. 201, No. 3, pp. 241-248.  
CODEN: ZLUFAR. ISSN: 0044-3026.  
DOCUMENT TYPE: Article  
LANGUAGE: German  
ENTRY DATE: Entered STN: 29 Nov 1995  
Last Updated on STN: 29 Nov 1995

AB The most important odorants in the crumbs of wheat breads (French-type) prepared according to two different dough recipes using pre-fermentation (crumb I: liquid pre-ferment, containing 0.25% yeast and 1.5% yeast in the final dough; crumb II: soft dough pre-ferment containing 15% yeast and 4.6% yeast in the final dough) were evaluated on the basis of aroma extract dilution analyses. In crumb I, exhibiting the more typical flavour, comparatively higher flavour dilution (FD) factors were found especially for 2-phenylethanol (2-PE) and 3-methylbutanol (3-MB), while in crumb II the FD factors of methional, 1-octen-3-one, 4-hydroxy-2,5-dimethyl-3(2H)-furanone, butanoic acid and 2- and 3-methylbutanoic acid were higher than in crumb I. Quantitative studies (stable isotope dilution assays) of 2-PE and 3-MB formation, in the liquid pre-ferments containing low yeast concentrations (0.25%) revealed that anaerobic conditions and a fermentation temperature of 35 degree C favoured the production of both odorants. Model studies, in which either the 3-MB precursors L-leucine and 3-methylbutanal or the 2-PE precursors L-phenylalanine and phenylacetaldehyde had been added to the pre-ferments, indicated that bakers yeast significantly (15-55%) converted these precursors into the respective odorant.

L27 ANSWER 40 OF 42 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on STN

ACCESSION NUMBER: 1995:33665 BIOSIS Full-text  
DOCUMENT NUMBER: PREV199598047965  
TITLE: Formation of the intense flavor compound trans-4,5-epoxy-(E)-2-decenal in thermally treated fats.  
AUTHOR(S): Gassenmeier, Klaus; Schieberle, Peter [Reprint author]  
CORPORATE SOURCE: Bergische Univ./GH, Lebensmittelchemie, Gauss-Str. 20, D-42097 Wuppertal, Germany  
SOURCE: Journal of the American Oil Chemists' Society, (1994) Vol. 71, No. 12, pp. 1315-1319.  
CODEN: JOAC7. ISSN: 0003-021X.  
DOCUMENT TYPE: Article  
LANGUAGE: English  
ENTRY DATE: Entered STN: 25 Jan 1995  
Last Updated on STN: 25 Jan 1995

L27 ANSWER 41 OF 42 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on

STN

ACCESSION NUMBER: 1994:357704 BIOSIS Full-text  
 DOCUMENT NUMBER: PREV199497370704  
 TITLE: Comparison of important odorants in puff-pastries prepared with butter or margarine.  
 AUTHOR(S): Gassenmeier, Klaus [Reprint author]; Schieberle, Peter [Reprint author]  
 CORPORATE SOURCE: Deutsche Forschungsanstalt Lebensmittelchemie, Lichtenbergstrasse 4, D-85748 Garching, Germany  
 SOURCE: Lebensmittel-Wissenschaft und Technologie, (1994) Vol. 27, No. 3, pp. 282-288.  
 CODEN: LBWTAP. ISSN: 0023-6438.  
 DOCUMENT TYPE: Article  
 LANGUAGE: English  
 ENTRY DATE: Entered STN: 23 Aug 1994  
 Last Updated on STN: 23 Aug 1994

AB To reveal the flavour differences in puff-pastries prepared by using butter (I) or margarine (II) rise most important odorants in aroma extracts of both pastries were compared by application of aroma extract dilution analyses. The data revealed high FD-factors for delta-decalactone, (E)-2-nonenal, 4-hydroxy-2,5-dimethyl-3 (2H)-furanone (HDF), butanoic acid and 3- and 2-methyl-butanoic acid in I, while (Z)-2-nonenal, 4,5-epoxy-(E)-2-decenal, (E,Z)-2,4-decadienal, (E)-2-nonenal and HDF were the most odour-active compounds in II. A calculation of odour activity values (OAV; ratio of concentration to odour thresholds) confirmed that compared to I especially the significantly higher OAV's of the metallic smelling 4,5-epoxy-(E)-2-decenal and the fatty, green smelling (E,Z)-2,4-decadienal in combination with the lack of the coconut-like smelling delta-decalactone in II are mainly responsible for the differences in the overall flavours of both products. In addition, a quantification of diacetyl in I indicated that during baking a significant degradation of this key butter odorant takes place.

L27 ANSWER 42 OF 42 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on STN

ACCESSION NUMBER: 1993:477395 BIOSIS Full-text  
 DOCUMENT NUMBER: PREV199396110995  
 TITLE: Character impact odour compounds of different kinds of butter.  
 AUTHOR(S): Schieberle, P.; Gassenmeier, K.; Guth, H.; Sen, A.; Grosch, W. [Reprint author]  
 CORPORATE SOURCE: Deutsche Forschungsanstalt Lebensmittelchemie, Lichtenbergstrasse 4, D-8046 Garching, Germany  
 SOURCE: Lebensmittel-Wissenschaft und Technologie, (1993) Vol. 26, No. 4, pp. 347-356.  
 CODEN: LBWTAP. ISSN: 0023-6438.  
 DOCUMENT TYPE: Article  
 LANGUAGE: English  
 ENTRY DATE: Entered STN: 22 Oct 1993  
 Last Updated on STN: 22 Oct 1993

AB Sensory evaluation of five different kinds of butter revealed an Irish sour cream butter (ISC) and a farmer sour cream butter (FSC) with the highest overall odour intensities. Nineteen odour-active compounds were detected by aroma extract dilution analysis in a distillate of the ISC butter. The highest flavour dilution (FD)-factors were found for delta-decalactone, skatole, (Z)-6-dodeceno-gamma-lactone and diacetyl followed by (E)-2-nonenal, (Z,Z)-3,6-nonadienal, (Z)-2-nonenal and 1-octen-3-one. Odour activity values (OAV; ratio of concentration to odour threshold) were calculated from quantitative data determined by means of stable isotope dilution assays and from odour thresholds in oil. Diacetyl followed by delta-decalactone and

butanoic acid showed the highest OAVs in the ISC butter and a cultured butter with creamy, sweet odours. In contrast, a sweaty, rancid odour predominated in the FSC butter in which butanoic acid showed the highest OAV. The odour of a mixture of diacetyl (0.34 mg/kg), delta-decalactone (4.9 mg/kg) and butanoic acid (3.6 mg/kg) in sunflower oil was in very good agreement with the odour of the cultured butter containing the same amounts of these odorants. The data suggest that the three odorants should be useful as indicators for the objective assessment of the buttery odour note in milkfat-containing products.

Structures uploaded into STN REGISTRY

Uploading L1.str



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chain nodes :
1  2  3  4  5  6  7 13 14
ring nodes :
8  9 10
chain bonds :
1-2 1-14 2-3 2-6 3-4 4-5 4-7 5-13 8-9 8-10
exact/norm bonds :
1-2 1-14 2-3 2-6 3-4 4-5 4-7 5-13 8-9 8-10

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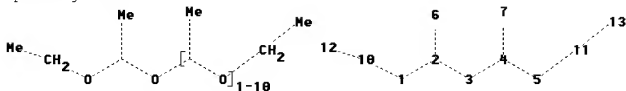
G1:Cb,Ak,H, [\*1]

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Match level :
1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 8:Atom 9:Atom
10:Atom
13:CLASS 14:CLASS

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chain nodes :
1  2  3  4  5  6  7 10 11 12 13
chain bonds :
1-2 1-10 2-3 2-6 3-4 4-5 4-7 5-11 10-12 11-13
exact/norm bonds :

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10/534,435

1-2 1-10 2-3 2-6 3-4 4-5 4-7 5-11 10-12 11-13

Match level :

1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 10:CLASS 11:CLASS  
12:CLASS 13:CLASS



Full search history

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(FILE 'HOME' ENTERED AT 11:53:46 ON 07 NOV 2008)

FILE 'REGISTRY' ENTERED AT 11:53:57 ON 07 NOV 2008

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D L1  
L2 2 SEA SSS SAM L1  
D SCAN  
L3 73 SEA SSS FUL L1  
SAVE L3 DEE435L1ST/A

FILE 'HCAPLUS' ENTERED AT 11:56:23 ON 07 NOV 2008

L4 50 SEA ABB=ON PLU=ON L3  
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SAVE TEMP L4 DEE435HCL3/A  
D L5  
S L5

FILE 'REGISTRY' ENTERED AT 12:00:11 ON 07 NOV 2008

FILE 'HCAPLUS' ENTERED AT 12:00:12 ON 07 NOV 2008

FILE 'REGISTRY' ENTERED AT 12:00:23 ON 07 NOV 2008

L5 STRUCTURE UPLOADED  
D L5  
L6 0 SEA SUB=L3 SSS SAM L5  
L7 5 SEA SUB=L3 SSS FUL L5  
D SCAN

FILE 'HCAPLUS' ENTERED AT 12:02:00 ON 07 NOV 2008

L8 9 SEA ABB=ON PLU=ON L7  
D L8 1-9 TI  
SAVE TEMP L8 DEE435HCL7/A  
E NELISSEN J?/AU  
L9 25 SEA ABB=ON PLU=ON NELISSEN J?/AU  
E GASSENMEIER K?/AU  
L10 19 SEA ABB=ON PLU=ON GASSENMEIER K?/AU  
E FURRER S?/AU  
L11 33 SEA ABB=ON PLU=ON FURRER S?/AU  
E DANIHER A?/AU  
L12 26 SEA ABB=ON PLU=ON DANIHER A?/AU  
L13 1 SEA ABB=ON PLU=ON L9 AND L10 AND L11 AND L12  
L14 94 SEA ABB=ON PLU=ON (L9 OR L10 OR L11 OR L12)  
L15 42 SEA ABB=ON PLU=ON L14 AND GIVAUD?/CO,CS,PA,SO  
L16 1 SEA ABB=ON PLU=ON L9 AND (L10 OR L11 OR L12)  
L17 2 SEA ABB=ON PLU=ON L10 AND (L11 OR L12)  
L18 6 SEA ABB=ON PLU=ON L11 AND L12  
L19 33 SEA ABB=ON PLU=ON L15 AND (FLAVO? OR FRAGR? OR GUSTAT? OR  
SCENT? OR AROMA? OR TAST?)  
L20 33 SEA ABB=ON PLU=ON L13 OR (L16 OR L17 OR L18 OR L19)  
SAVE TEMP L20 DEE435HCIN/A

FILE 'MEDLINE, BIOSIS, EMBASE, DRUGU, KOSMET' ENTERED AT 12:08:09 ON 07 NOV 2008

L21 0 SEA ABB=ON PLU=ON L13  
L22 5 SEA ABB=ON PLU=ON L19

```

L23      2 SEA ABB=ON   PLU=ON   (L16 OR L17 OR L18)
L24      5 SEA ABB=ON   PLU=ON   L22 OR L23
L25      11 SEA ABB=ON  PLU=ON   L14 AND (FLAVO? OR FRAGR? OR GUSTAT? OR
L26      11 SEA ABB=ON  PLU=ON   L24 OR L25
          SAVE TEMP L26 DEE435MLIN/A
          D STAT QUERY L8

```

FILE 'HCAPLUS' ENTERED AT 12:11:41 ON 07 NOV 2008  
D L8 1-9 IBIB ED ABS HITSTR

FILE 'MEDLINE, BIOSIS, EMBASE, DRUGU, KOSMET' ENTERED AT 12:11:43 ON 07  
NOV 2008

D QUE L20  
D QUE L26

```

L27      FILE 'HCAPLUS, BIOSIS' ENTERED AT 12:12:14 ON 07 NOV 2008
          42 DUP REM L20 L26 (2 DUPLICATES REMOVED)
          ANSWERS '1-33' FROM FILE HCAPLUS
          ANSWERS '34-42' FROM FILE BIOSIS
          D L27 1-42 IBIB AB

```

FILE HOME

#### FILE REGISTRY

Property values tagged with IC are from the ZIC/VINITI data file  
provided by InfoChem.

STRUCTURE FILE UPDATES: 6 NOV 2008 HIGHEST RN 1071288-19-1  
DICTIONARY FILE UPDATES: 6 NOV 2008 HIGHEST RN 1071288-19-1

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH July 5, 2008.

Please note that search-term pricing does apply when  
conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and  
predicted properties as well as tags indicating availability of  
experimental property data in the original document. For information  
on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stdoc/properties.html>

#### FILE HCAPLUS

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FILE COVERS 1907 - 7 Nov 2008 VOL 149 ISS 20  
FILE LAST UPDATED: 6 Nov 2008 (20081106/ED)

HCAplus now includes complete International Patent Classification (IPC) reclassification data for the second quarter of 2008.

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

#### FILE MEDLINE

FILE LAST UPDATED: 6 Nov 2008 (20081106/UP). FILE COVERS 1949 TO DATE.

MEDLINE has been updated with the National Library of Medicine's revised 2008 MeSH terms. See HELP RLOAD for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

See HELP RANGE before carrying out any RANGE search.

MEDLINE Accession Numbers (ANs) for records from 1950-1977 have been converted from 8 to 10 digits. Searches using an 8 or 10 digit AN will retrieve the same record. The 10-digit ANs can be expanded, searched, and displayed in all records from 1949 to the present.

#### FILE BIOSIS

FILE COVERS 1926 TO DATE.

CAS REGISTRY NUMBERS AND CHEMICAL NAMES (CNs) PRESENT FROM JANUARY 1926 TO DATE.

RECORDS LAST ADDED: 5 November 2008 (20081105/ED)

BIOSIS has been augmented with 1.8 million archival records from 1926 through 1968. These records have been re-indexed to match current BIOSIS indexing.

#### FILE EMBASE

FILE COVERS 1974 TO 7 Nov 2008 (20081107/ED)

EMBASE was reloaded on March 30, 2008.

EMBASE is now updated daily. SDI frequency remains weekly (default) and biweekly.

This file contains CAS Registry Numbers for easy and accurate substance identification.

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For further assistance, please contact your local helpdesk.

#### FILE DRUGU

FILE LAST UPDATED: 5 NOV 2008 <20081105/UP>

>>> DERWENT DRUG FILE (SUBSCRIBER) <<<

>>> FILE COVERS 1983 TO DATE <<<

>>> THESAURUS AVAILABLE IN /CT <<<

10/534,435

FILE KOSMET

FILE LAST UPDATED: 10 OCT 2008 <20081010/UP>

FILE COVERS 1968 TO DATE.

>>> SIMULTANEOUS LEFT AND RIGHT TRUNCATION IS AVAILABLE  
IN THE BASIC INDEX (/BI) FIELD <<<